



STATE OF IDAHO
DEPARTMENT OF
ENVIRONMENTAL QUALITY

1410 North Hilton • Boise, Idaho 83706-1255 • (208) 373-0502

Dirk Kempthorne, Governor
C. Stephen Allred, Director

November 5, 2002

CERTIFIED MAIL No. 7000 0520 0016 0850 9047

Dale McCleary, Controller
MotivePower, Inc.
4600 Apple St.
Boise, ID 83716

RE: AIRS Facility No. 001-00107, MotivePower Inc., Boise
Final Tier II Operating Permit and Permit to Construct

Dear Mr. McCleary:

The Department of Environmental Quality (Department) is issuing Tier II Operating Permit and Permit to Construct No. 001-00107 for the MotivePower facility in Boise, in accordance with the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400 - 461 and 58.01.01.200 - 228, respectively.

The enclosed Tier II operating permit and permit to construct is effective immediately. The permit is based on the information contained in your application and on all relevant comments received during the public comment period.

Mike McGown of the Boise Regional Office will contact you regarding a meeting with the Department to discuss the permit terms and requirements. The Department recommends the following representatives attend this meeting: your facility's plant manager, responsible official, environmental contact, and any operations staff responsible for day-to-day compliance with permit conditions.

You, as well as any other entity, may have the right to appeal this final agency action pursuant to IDAPA 58.01.23, *Rules of Administrative Procedure Before the Board of Environmental Quality*. A petition may be filed with the Hearings Coordinator, Department of Environmental Quality, 1410 N. Hilton, Boise, ID 83706-1255 within 35 days of the date of this decision. However, prior to filing a petition for a contested case, the Department encourages you to contact Mike Simon at (208) 373-0502 or msimon@deq.state.id.us to discuss any questions or concerns you may have with the enclosed permit.

Sincerely,

Katherine B. Kelly
Administrator
Air Quality Division

Enclosures

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cc: Mike McGown, Boise Regional Office
Sherry Davis, Air Quality Division
Laurie Kral, EPA Region 10



**Air Quality
TIER II OPERATING PERMIT
and
PERMIT TO CONSTRUCT**

**State of Idaho
Department of Environmental Quality**

PERMIT NO.: 001-00107

AQCR: 064

CLASS: A

SIC: 3743

ZONE: 11

UTM COORDINATE (km): 567.0 , 4823.0

1. PERMITTEE

MotivePower, Inc.

2. PROJECT

Facility-wide Tier II operating permit and permit to construct

3. MAILING ADDRESS

4600 Apple St.

CITY

Boise

STATE

ID

ZIP

83716

4. FACILITY CONTACT

Christopher D. Osgood

TITLE

Environmental Health and
Safety Technician

TELEPHONE

(208) 947-3026

5. RESPONSIBLE OFFICIAL

Dale McCleary

TITLE

Controller

TELEPHONE

(208) 947-2934

6. EXACT PLANT LOCATION

4600 Apple St., (Main Plant)

2100 Braniff St. (Truck and Engine Annex), Boise, ID, 83716

COUNTY

Ada

7. GENERAL NATURE OF BUSINESS & KINDS OF PRODUCTS

Remanufacture and maintenance of locomotives, and manufacture of loco motives

8. PERMIT AUTHORITY

This permit is issued according to the *Rules for the Control of Air Pollution in Idaho*, IDAPA 58.01.01.400-470 and IDAPA 58.01.01.200-228. This permit pertains only to emissions of air contaminants regulated by the state of Idaho and to the sources specifically allowed to be operated by this permit.

This permit is not transferable to another person, place, or piece or set of equipment. This permit will expire if construction has not yet begun within two years of its issue date or if construction is suspended for one year.

This permit has been granted on the basis of design information presented in the application and the Department of Environmental Quality's technical analysis of the supplied information. Changes in design or equipment that result in any change in the nature or amount of emissions may be considered a modification. Modifications are subject to Department review in accordance with IDAPA 58.01.01.200.


KATHERINE B. KELLY, ADMINISTRATOR, AIR QUALITY DIVISION
DEPARTMENT OF ENVIRONMENTAL QUALITY

DATE ISSUED: November 5, 2002

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LIST OF ACRONYMS

acfm	actual cubic feet per minute
AQCR	Air Quality Control Region
ASTM	American Society of Testing and Materials
CFR	Code of Federal Regulations
CO	carbon monoxide
Department	Department of Environmental Quality
EPA	Environmental Protection Agency
gal/day	gallons per day
gal/mo	gallons per month
gal/yr	gallons per year
gr/dscf	grains per dry standard cubic feet
km	kilometer
lb/gal	pounds per gallon
lb/hr	pounds per hour
lb/mo	pounds per month
IDAPA	A numbering designation for all administrative rules in Idaho promulgated under the Idaho Administrative Procedures Act
MMBtu/hr	million British thermal units per hour
MPI	MotivePower, Inc.
NO _x	oxides of nitrogen
O&M	Operating and Maintenance
PM	particulate matter
PM ₁₀	particulate matter with an aerodynamic diameter of 10 micrometers or less
PTC	permit to construct
scfm	standard cubic feet per minute
SIC	Standard Industrial Classification
SO ₂	sulfur dioxide
SWBP	Strip-Wash-Blast-Painting
TEA	Truck and Engine Annex
T/day	tons per day
T/yr	tons per year
UTM	Universal Transverse Mercator
VOC	volatile organic compound

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

1. PERMIT SCOPE

Purpose

- 1.1 This facility-wide permit establishes enforceable requirements to resolve past failures to obtain PTCs for some emissions units at MotivePower Inc. (MPI) located in Boise, Idaho. A Tier II permit and permit to construct is required in accordance with a compliance plan in a Tier I permit and in accordance with the *Rules for the Control of Air Pollution in Idaho*.
- 1.2 This permit incorporates the following permits:
- PTC No. 001-00107 for the new, large, paint, shop, issued to Morrison Knudsen October 18, 1994.
 - PTC No. 001-00107 for the new, strip-wash-blast-paint building, issued to Boise Locomotive August 17, 1998.
 - PTC No. 001-00107 for the engine emissions-reduction test facility, issued to MotivePower June 23, 2000. This PTC was modified July 17, 2001. (Permit terminated due to shutdown.)

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

Regulated Sources

1.3 Table 1.1 below lists the sources that are regulated in this permit.

Table 1.1 EMISSIONS SOURCES

Permit Sections	Source Description	Emissions Control
2.	<u>FACILITY-WIDE CONDITIONS</u>	
3.	<u>NATURAL GAS-FIRED BOILERS</u> Seller No. 1 boiler – Model: 105-E steam boiler; Rated Heat Input Capacity of 6.7 MMBtu/hr. Seller No. 2 boiler – Model: 105-E steam boiler; rated heat input capacity of 6.7 MMBtu/hr.	None None
4.	<u>NEW, LARGE, PAINT SHOP</u> The shop contains two spray paint booths	PM is controlled by filters with an efficiency of 98.4%.
5.	<u>NEW, STRIP-WASH-BLAST-PAINTING BUILDING</u> This building contains one booth that is designed so that either painting or blasting can occur at any one time – never simultaneously.	Blast booth pulse-jet dust collector system designed by Hoffman/Torit, Model: HOF4-64; PM/PM ₁₀ are controlled with an efficiency of 99.9%. Paint-arrestor filter system designed by OSM. PM/PM ₁₀ controlled with an efficiency of 99.8%.
6.	<u>OLD, LARGE, PAINT SHOP</u> The shop contains two spray paint booths.	PM is controlled by filters with an efficiency of 98%.
7.	<u>SMALL, PAINT SHOP</u> The shop contains one paint booth.	PM is controlled by filters with an efficiency of 98%.
8.	<u>MPI BEAD-BLAST ENCLOSURES (3 total)</u> Enclosures consist of three units: fabrication-shop unit, component-shop unit, and locomotive-shop unit.	Each enclosure has a baghouse with PM/PM ₁₀ control efficiency of 98%.
9.	<u>PANEL MASTER ARC METAL CUTTER</u>	None
10.	<u>COMPRESSOR TEST STAND</u>	None
11.	<u>LOCOMOTIVE ENGINE TEST CELL STAND</u> The locomotive engine is physically removed from the locomotive and mounted on a stationary engine stand for testing in a sound-deadening room with the combustion exhaust vented through a muffler system and then to a stack. Each engine is tested for a maximum of 8 hours, and up to 200 engines are tested annually.	None
12.	<u>SPRAY PAINT BOOTH</u> The spray paint booth, a Protectaire Model 530 DTT, at the Truck and Engine Annex (TEA) is used for painting the locomotive engines and trucks.	Particulate emissions from the spray paint booth are controlled by a bank of filters that have a control efficiency of 98%.
13.	<u>TEA BEAD-BLAST ENCLOSURES (2 UNITS)</u> Enclosures consist of two blasting units.	Each enclosure unit has a baghouse with a PM/PM ₁₀ control efficiency of 98%.
14.	<u>SHOT-BLAST BOOTH</u> The shot-blast booth is a Hoffman Schmidt/Abrasive Steel Shotblaster. It uses steel grit media for the blasting process.	Particulate emissions from the shot-blast booth are controlled by a baghouse, Torit Model HDFT2, with a PM/PM ₁₀ collection efficiency of 99%.

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

2. FACILITY-WIDE

The following table contains a summary of requirements that apply generally to emissions units at the facility:

Table 2.1 SUMMARY OF EMISSION UNIT REQUIREMENTS

Permit Conditions	Parameter	Permit Limit/ Standard Summary	Applicable Requirements Reference	Monitoring and Record-Keeping Requirements
2.1	Fugitive dust	Reasonable control	IDAPA 58.01.01.650-651	2.2, 2.3, 2.4
2.6	Odors	Reasonable control	IDAPA 58.01.01.775-776	2.7
2.8	Opacity	20% for no more than three minutes in any 60- minute period	IDAPA 58.01.01.625	2.9
2.11	Fuel burning	0.015 gr/dscf for gas 0.050 gr/dscf for liquid	IDAPA 58.01.01.676-677	
2.12	Fuel sulfur content	0.3% for Grade 1 0.5% for Grade 2	IDAPA 58.01.01.728	2.13

Fugitive Emissions

- 2.1 All reasonable precautions shall be taken to prevent PM from becoming airborne in accordance with IDAPA 58.01.01.650-651.
[IDAPA 58.01.01.650-651, 5/1/94]
- 2.2 Unless specified elsewhere in this permit, the permittee shall monitor and maintain records of the frequency and the method(s) used (i.e., water, chemical dust suppressants, etc.) to reasonably control fugitive emissions.
[IDAPA 58.01.01.405, 5/1/94]
- 2.3 Unless specified elsewhere in this permit, the permittee shall maintain records of all fugitive dust complaints received. The permittee shall take appropriate corrective action as expeditiously as practicable upon receipt of a valid complaint. The records shall, at a minimum, include the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
[IDAPA 58.01.01.405, 5/1/94]
- 2.4 Unless specified elsewhere in this permit, the permittee shall conduct a monthly facility-wide inspection of potential sources of fugitive emissions, during daylight hours and under normal operating conditions, to ensure that the methods used to reasonably control fugitive emissions are effective. If fugitive emissions are not being reasonably controlled, the permittee shall take corrective action as expeditiously as practicable. The permittee shall maintain records of the results of each monthly fugitive emissions inspection. The records shall, at a minimum, include the date of each inspection and a description of the following: the permittee's assessment of the conditions existing at the time fugitive emissions were present (if observed), any corrective action taken in response to the fugitive emissions, and the date the corrective action was taken.
[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued November 5, 2002

- 2.5 Fugitive emissions shall not be observed leaving the property for a period or periods aggregating more than three minutes in any 60-minute period. Visible emissions shall be determined by EPA Reference Method 22, as described in 40 CFR 60, Appendix A, or by an alternative method approved by the Department.
[IDAPA 58.01.01.405, 5/1/94]

Odors

- 2.6 No person shall allow, suffer, cause, or permit the emissions of odorous gases, liquids, or solids to the atmosphere in such quantities as to cause air pollution.
[IDAPA 58.01.01.775-776, 5/1/94 (State-only)]
- 2.7 Unless specified elsewhere in this permit, the permittee shall maintain records of all odor complaints received. If the complaint has merit, the permittee shall take appropriate corrective action as expeditiously as practicable. The records shall, at a minimum, include the date each complaint was received and a description of the following: the complaint, the permittee's assessment of the validity of the complaint, any corrective action taken, and the date the corrective action was taken.
[IDAPA 58.01.01.405, 5/1/94]

Visible Emissions

- 2.8 No person shall discharge any air pollutant to the atmosphere from any point of emissions for a period or periods aggregating more than three minutes in any 60-minute period which is greater than 20% opacity as determined by procedures contained in IDAPA 58.01.01.625. These provisions shall not apply when the presence of uncombined water, nitrogen oxides, and/or chlorine gas are the only reason(s) for the failure of the emissions to comply with the requirements of this section.
[IDAPA 58.01.01.625, 4/5/00]
- 2.9 Unless specified elsewhere in this permit, the permittee shall conduct a monthly facility-wide inspection of potential sources of visible emissions during daylight hours and under normal operating conditions. The inspection shall consist of a see/no see evaluation for each potential source of visible emissions. If any visible emissions are present from any point of emissions, the permittee shall either take appropriate corrective action as expeditiously as practicable, or perform a Method 9 opacity test in accordance with the procedures outlined in IDAPA 58.01.01.625. A minimum of 30 observations shall be recorded when conducting the opacity test. If opacity is greater than 20% for a period or periods aggregating more than three minutes in any 60-minute period, the permittee shall take all necessary corrective action and report the exceedance in its annual compliance certification and in accordance with IDAPA 58.01.01.130-136. The permittee shall maintain records of the results of each monthly visible emissions inspection and each opacity test when conducted. The records shall, at a minimum, include the date and results of each inspection and test and a description of the following: the permittee's assessment of the conditions existing at the time visible emissions are present (if observed), any corrective action taken in response to the visible emissions, and the date corrective action was taken.
[IDAPA 58.01.01.405, 5/1/94]

Excess Emissions

- 2.10 The permittee shall comply with the procedures and requirements of IDAPA 58.01.01.130-136 for excess emissions due to startup, shutdown, scheduled maintenance, safety measures, upsets, and breakdowns.
[IDAPA 58.01.01.130-136, 4/5/00]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

Fuel-Burning Equipment

- 2.11 The permittee shall not discharge to the atmosphere from any fuel-burning equipment PM in excess of 0.015 gr/dscf of effluent gas corrected to 3% oxygen by volume for gas, 0.050 gr/dscf of effluent gas corrected to 3% oxygen by volume for liquid, 0.050 gr/dscf of effluent gas corrected to 8% oxygen by volume for coal, and 0.080 gr/dscf of effluent gas corrected to 8% oxygen by volume for wood products.

[IDAPA 58.01.01.676-677, 5/1/94]

Sulfur Content

- 2.12 No person shall sell, distribute, use, or make available for use any distillate fuel oil containing more than the following percentages of sulfur:

- ASTM Grade 1 fuel oil - 0.3% by weight.
- ASTM Grade 2 fuel oil - 0.5% by weight.
- Residual fuel oil (ASTM Grade 4,5, and 6) – 1.75% by weight

[IDAPA 58.01.01.728, 5/1/94]

- 2.13 The facility shall maintain purchase records or equivalent from the manufacturer that show the sulfur content of the fuel oil delivered to the facility.

Facility Production

2.14 Locomotives and Trucks Production Operating Requirements

- The maximum number of locomotives produced at the MPI-Apple Street site shall not exceed 150 locomotives per any consecutive 12-month period.
- The maximum number of locomotive engines and trucks produced at the TEA facility shall not exceed 200 locomotive engines and 200 trucks per any consecutive 12-month period.

[IDAPA 58.01.01.405, 5/1/94]

2.15 Locomotives Production Monitoring and Recording

- 2.15.1 The permittee shall monitor and record the following parameters to verify compliance with Permit Condition 2.14.

- The number of locomotives produced at the MPI-Apple Street and TEA facilities per month and per any consecutive 12-month period.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

2.16 Fuel Specification

The following sources at the MPI-Apple Street and TEA sites shall burn natural gas exclusively: locomotive shop steam cleaner; small, paint shop steam cleaner; component shop furnace; TEA Proceco parts washer; Maxom Tube-O-Therm evaporator; the Strip-Wash-Blast-Painting (SWBP) building heater; and the new, large, paint shop heaters.

[IDAPA 58.01.01.405, 5/1/94]

Reports and Certifications

- 2.17 Any reporting required by this permit, including, but not limited to, records, monitoring data, supporting information, requests for confidential treatment, testing reports, or compliance certifications, shall contain a certification by a responsible official. The certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document(s) are true, accurate, and complete. Any reporting required by this permit shall be submitted to the following:

Air Quality Permit Compliance
Department of Environmental Quality
Boise Regional Office
1445 N. Orchard
Boise, ID 83706-2239

[IDAPA 58.01.01.405, 5/1/94; IDAPA 58.01.01.123, 5/1/94; IDAPA 58.01.01.08, 11, 5/1/94]

Monitoring and Record Keeping

- 2.18 The permittee shall maintain sufficient record keeping to assure compliance with the terms and conditions of this permit. Records of monitoring information shall include, but not be limited to, the following: (a) the date, place, and times of sampling or measurements; (b) the date analyses were performed; (c) the company or entity that performed the analyses; (d) the analytical techniques or methods used; (e) the results of such analyses; and (f) the operating conditions existing at the time of sampling or measurement. All monitoring records and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report, or application. Supporting information includes, but is not limited to, all calibration and maintenance records, all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

All records required to be maintained by this permit shall be made available in either hard copy or electronic format to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94; IDAPA 58.01.01.322.07, 5/1/94]

Open Burning

- 2.19 The permittee shall comply with the provisions of IDAPA 58.01.01.600-616 to protect public health and welfare from air pollutants resulting from open burning.

[IDAPA 58.01.01.600-616, 5/1/94]

Air Stagnation Advisory Days

- 2.20 The permittee shall comply with the Air Pollution Emergency Rules in IDAPA 58.01.01.550-562.

[IDAPA 58.01.01.550, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

MPI Apple Street

3. SELLER BOILERS 1 AND 2, MPI, APPLE STREET

3.1 Boilers Process Description

The facility has two natural gas-fired boilers that are located at the east end of the locomotive shop. One boiler is operational and the other is a backup. The boilers will not operate simultaneously.

3.2 Boiler Control Description

Emissions from the natural gas-fired boilers are uncontrolled.

EMISSIONS LIMITS

3.3 Boiler Particulate Emissions Limits

Particulate matter emissions from each of the boiler stacks shall not exceed 0.015 gr/dscf of effluent gas adjusted to 3% oxygen by volume when natural gas is combusted, as required in IDAPA 58.01.01.677.

[IDAPA 58.01.01.676-677, 5/1/94]

OPERATING REQUIREMENTS

3.4 Fuel Specification

Seller boilers No. 1 and No. 2 shall be fueled by natural gas exclusively.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

4. NEW, LARGE, PAINT SHOP, MPI, APPLE STREET

4.1 Process Description

The new, large, paint shop is located at the southwest corner of the MPI-Apple Street facility. The shop contains two spray paint booths used to paint manufactured or remanufactured locomotives. Each spray paint booth is equipped with a 48,400 acfm air handling system. The Department issued a PTC for the new, large, paint shop October 18, 1994.

4.2 New, Large, Paint Shop Control Description

Particulate emissions from the new, large, paint shop are controlled by filters that have a control efficiency of 98.4%. The VOC emissions are uncontrolled.

EMISSIONS LIMITS

4.3 Paint Booth Emissions Limits

The PM₁₀ and VOC emissions from each spray booth stack shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[PTC No. 001-00107, 10/18/94]

OPERATING REQUIREMENTS

4.4 Paint Booth Usage Limits

The maximum amount of all coatings and solvents sprayed at the new, large, paint shop shall not exceed 46 gal/day and 16,000 gal/yr. Coatings and solvents shall include, but not be limited to, any enamels, lacquers, primers, clean-up solvents, and reducers.

[PTC No. 001-00107, 10/18/94]

4.5 Filter System Pressure Drop and Maintenance

The static pressure drop across each spray-paint-booth exhaust filter shall be maintained within manufacturer specifications. All filter pads shall be replaced in accordance with manufacturer specifications.

[PTC No. 001-00107, 10/18/94]

4.6 Operations & Maintenance Manual

Within 60 days of issuance of this permit, the permittee shall have developed, according to manufacturer specifications and recommendations, an O&M manual for the air pollution control equipment used to control PM emissions from the new large, paint shop's spray-paint booths. The O&M manual shall address the operation, maintenance, and repair of the air pollution control equipment and shall, at a minimum, include a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall stipulate that all filter pads be replaced according to manufacturer specifications and recommendations. The O&M manual shall be maintained on site at all times, and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

MONITORING AND RECORD-KEEPING REQUIREMENTS

4.7 Record-Keeping Requirements

The permittee shall monitor and record the following information in records which shall remain on site for a period of five years. The records shall be made available to Department representatives upon request.

- The type and amount of all coatings and solvents sprayed at the new, large, paint shop in gallons per day and gallons per year.
- The pressure drop across each spray-paint-booth filter system shall be recorded once daily. Pressure drop recordings are not required on days the spray-paint booth is not in operation.

[IDAPA 58.01.01.405, 5/1/94]

4.8 Monitor Pressure Drop

The permittee shall install, calibrate, maintain, and operate a pressure drop monitoring device that measures the static pressure differential across the exhaust filters used in each paint booth.

[PTC No. 001-00107, 10/18/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

5. NEW, STRIP-WASH-BLAST-PAINT BUILDING, MPI, APPLE STREET**5.1 Process Description**

The new SWBP building is located at the MPI-Apple Street facility. The new SWBP is composed of four separate sections; a strip section, wash section, blast and prime section, and a mechanical and locker/breakroom section. The strip section is designed for the disassembly of locomotives. The wash section is used to wash the locomotive frame, car body, and miscellaneous equipment. Minor welding takes place in the mechanical room. The blast and paint section is used for steel-grit blasting of locomotive frames and components to remove old paint and rust. After blasting, a coat of primer paint is applied. Painting and blasting are conducted in one booth; the booth is designed so that either painting or blasting can occur at any one time, never simultaneously. The mechanical and locker/breakroom section has natural gas-fired heaters. The Department issued a PTC for the new SWBP building August 17, 1998.

5.2 SWBP Control Description

Particulate emissions from the blasting operation at the SWBP building are controlled by a pulse-jet dust collector system with a control efficiency of 99.9%. Particulate emissions from the painting operation at the SWBP building are controlled by a paint-arrestor filter system with a control efficiency of 99.8%. The VOC emissions are uncontrolled.

EMISSIONS LIMITS**5.3 SWBP Building Emissions Limits**

The PM₁₀ and VOC emissions from the SWBP building stacks shall not exceed any corresponding emissions rate limits listed in the appendix of this permit.

[PTC No. 001-00107, 8/17/98]

OPERATING REQUIREMENTS**5.4 Blasting Booth Usage Limits**

The maximum amount of steel grit, blasting media throughput at the blasting booth shall not exceed 282 T/day.

[IDAPA 58.01.01.405, 5/1/94]

5.5 Paint Booth Usage Limits

The permittee shall comply with the following limits:

- The maximum amount of paint used at the paint booth shall not exceed 25 gal/day, and shall not exceed 8,750 gallons per consecutive 12-month period.
- The maximum amount of thinner used at the paint booth shall not exceed 5 gal/day, and shall not exceed 1,750 gallons per consecutive 12-month period.
- Paints that contain cadmium or chromium shall not be used in the paint booth, as per applicant submittal.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

5.6 VOC Usage Limits

The maximum VOC usage in the paint booth shall not exceed 30 tons per consecutive 12-month period.

[PTC No. 001-00107, 8/17/98]

5.7 Blast-Booth Pulse-Jet Dust Collector

The pressure drop across the blast-booth pulse-jet dust collector shall be maintained within manufacturer and O&M manual specifications. Documentation of the operating pressure drop specifications for the dust collector shall remain on site at all times and shall be made available to Department representatives upon request.

[PTC No. 001-00107, 8/17/98]

5.8 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the air pollution control equipment of the new SWBP building according to manufacturer specifications and recommendations. The pressure drops across the blast-booth pulse-jet dust collector system and the paint-arrestor filter system shall be maintained within manufacturer and O&M manual specifications. The pressure drop across both air pollution control systems shall be monitored and recorded once daily. The O&M manual shall address the operation, maintenance, and repair of the new SWBP building air pollution control equipment and shall, at a minimum, include a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall be maintained on site at all times and shall be made available to Department representatives upon request.

[PTC No. 001-00107, 8/17/98; IDAPA 58.01.01.405, 5/1/94]

MONITORING AND RECORD-KEEPING REQUIREMENTS

5.9 Record-Keeping Requirements

The permittee shall monitor and record the following information in records:

- 5.9.1 For each coating and solvent used in the paint booth, record the usage rate in gallons per month (gal/mo).
- 5.9.2 For each coating and solvent used in the paint booth, record the VOC content in pounds per gallon (lb/gal).
- 5.9.3 For each coating and solvent used in the paint booth, calculate and record the VOC usage in pounds per month (lb/mo). To calculate the VOC usage, multiply the usage rate (gal/mo) by the VOC content (lb/gal) for each coating and solvent.
- 5.9.4 Once monthly, calculate and record the total amount of VOC usage of the paint booth in pounds per month. To calculate the total VOC usage, add all of the individual VOC usage amounts for each coating and solvent that were recorded in Permit Condition 5.10.3. This VOC usage amount will then be used to demonstrate compliance with Permit Condition 5.6.
- 5.9.5 The amount of steel grit in tons per day throughput in the blasting booth at the SWBP building.
- 5.9.6 The pressure drop across the blasting pulse-jet dust collector system once on a daily basis.

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Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

- 5.9.7 The pressure drop across the paint-arrestor filter system once on a daily basis. Gallons per day and gallons per year of all coatings and solvents sprayed at the SWBP.

[IDAPA 58.01.01.405, 5/1/94; PTC No. 001-00107, 8/17/98]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

6. OLD, LARGE, PAINT SHOP, MPI, APPLE STREET

6.1 Process Description

The old, large, paint shop is located at the southwest corner of the MPI facility. The shop contains two spray paint booths, the east booth and the west booth. Both of the booths are used to paint manufactured or remanufactured locomotives. Each booth has two exhaust stacks; the west booth exhaust stacks have a flow of 17,500 acfm each, and east booth exhaust stacks a flow 12,900 acfm each.

6.2 Old, Large, Paint Shop Control Description

Particulate emissions from the east and west spray paint booths are controlled by filters that have a control efficiency of 98%. The VOC emissions are uncontrolled.

EMISSIONS LIMITS

6.3 Paint Booth Emissions Limits

The PM₁₀ and VOC emissions from each spray-booth stack shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

OPERATING REQUIREMENTS

6.4 Paint Booth Usage Limits

The maximum daily amount of all coatings and solvents sprayed at the old, large, paint shop shall not exceed 46 gal/day. The maximum annual amount of coatings and solvents sprayed shall not exceed 16,000 gallons per any consecutive 12-month period (gal/yr). Coatings and solvents shall include, but not be limited to, any enamels, lacquers, primers, clean-up solvents, and reducers.

[IDAPA 58.01.01.405, 5/1/94]

6.5 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the old, large, paint shop's air pollution control equipment according to manufacturer specifications and recommendations. The pressure drop across the paint filtration systems shall be maintained within manufacturer and O&M manual specifications. The pressure drop across both air pollution control systems shall be monitored and recorded daily. The O&M manual shall address the operation, maintenance, and repair of the old, large, paint shop's air pollution control systems and shall include, at a minimum, a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

MONITORING AND RECORD-KEEPING REQUIREMENTS

6.6 Record-Keeping Requirements

The permittee shall monitor and record the following information:

- The type and amount in gallons per day and gallons per month of all coatings and solvents sprayed at the old, large, paint shop.
- The pressure drop across each spray-paint-booth filter system shall be recorded daily. Pressure drop recordings are not required on days the spray-paint booth is not in operation.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

7. SMALL, PAINT SHOP, MPI, APPLE STREET

7.1 Process Description

The small, paint shop is located in the central section of the MPI site. The shop contains one spray-paint booth. There are two stacks that vent from the small, paint shop, each with an average flow of 17,500 acfm.

7.2 Small, Paint Shop Control Description

Particulate emissions from the small, paint shop are controlled by a bank of filters that have a control efficiency of 98%. The VOC emissions are uncontrolled.

EMISSIONS LIMITS

7.3 Paint Shop Emissions Limits

The PM and VOC emissions from each of the small, paint shop stacks shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

OPERATING REQUIREMENTS

7.4 Paint Shop Usage Limits

The maximum amount of all coatings and solvents sprayed at the small, paint shop shall not exceed 46 gal/day and 5,000 gal/yr. Coatings and solvents shall include, but not be limited to, any enamels, lacquers, primers, clean-up solvents, and reducers.

[IDAPA 58.01.01.405, 5/1/94]

7.5 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the small, paint shop's air pollution control equipment according to manufacturer specifications and recommendations. The pressure drop across the paint filtration system shall be maintained within manufacturer and O&M manual specifications. The pressure drop across the air pollution control system shall be monitored and recorded daily. The O&M manual shall address the operation, maintenance, and repair of the small-paint shop's air pollution control system, and shall include, at a minimum, a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

MONITORING AND RECORD-KEEPING REQUIREMENTS

7.6 Record-Keeping Requirements

The permittee shall monitor and record the following information:

- The type and amount in gallons per day and gallons per month of all coatings and solvents sprayed at the small, paint shop.
- The pressure drop across the small-paint-booth filter system shall be recorded daily. Pressure drop recordings are not required on days the spray-paint booth is not in operation.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

8. BEAD-BLAST ENCLOSURES (3 TOTAL), MPI, APPLE STREET

8.1 Process Description

The bead-blast enclosures use fine-grained, rounded, glass beads -- potter-quality Ballotini impact beads, type vi, class 2. The enclosures consist of the following three units: fabrication-shop unit, component-shop unit, and locomotive-shop unit.

8.2 Enclosures Control Description

Particulate emissions from each of the enclosures are controlled by a baghouse that has a control efficiency of 98%.

EMISSIONS LIMITS

8.3 Enclosures Emissions Limits

The PM₁₀ emissions from each of the fabrication-shop unit, component-shop unit, and the locomotive-shop unit stacks shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

OPERATING REQUIREMENTS

8.4 Blast Media Usage Limits

The maximum amount of blast media throughput for the fabrication-shop unit, component-shop unit, and the locomotive-shop unit shall not exceed 960 lb/hr each.

[IDAPA 58.01.01.405, 5/1/94]

8.5 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the three bead-blast-enclosure air pollution control systems according to manufacturer specifications and recommendations. The air pollution control equipment operating parameters shall be maintained within manufacturer and O&M manual specifications. The O&M manual shall address the operation, maintenance, and repair of the bead-blast-enclosure air pollution control systems, and shall include, at a minimum, a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

MONITORING AND RECORD-KEEPING REQUIREMENTS

8.6 Record-Keeping Requirements

The permittee shall monitor and record the amount of blast media throughput in pounds per day and the daily hours of operation for the fabrication-shop unit, component-shop unit, and the locomotive-shop unit.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

9. PANEL MASTER ARC METAL CUTTER

9.1 Process Description

The 640D Panel Master by CNC, Model OW-250, is located in the north bay of the fabrication shop in the central area of the MPI. It is a 250-amp, plasma-arc-cutting unit with a Torit TD486 dust collector. The Panel Master has one stack with a flow of 6 scfm. The Panel Master was constructed in 1981.

9.2 Control Description

The fume/dust collector uses a self-cleaning cycle with compressed air pulses and achieves 97% control efficiency for PM.

EMISSIONS LIMITS

9.3 Emissions Limits

The PM₁₀ and NO_x emissions from the Panel Master stack shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

OPERATING REQUIREMENTS

9.4 Hours of Operation Limits

The maximum daily hours of operation of the Panel Master cutter shall not exceed 10 hours per day. The maximum annual hours of operation of the emissions unit shall not exceed 2,500 hours per any consecutive 12-month period.

9.5 Fume/Dust Collector System Pressure Drop and Maintenance

The pressure drop across the fume/dust collector system of the Panel Master cutter shall be maintained within manufacturer specifications.

[IDAPA 58.01.01.405, 5/1/94]

9.6 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual in accordance with manufacturer specifications. The pressure drop across the fume/dust collector system of the Panel Master cutter shall be maintained within manufacturer and O&M manual specifications, and shall be monitored and recorded daily. The O&M manual shall address the operation, maintenance, and repair of the Panel Master cutter's air pollution control equipment and shall, at a minimum, include the following: a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall be maintained on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

MONITORING AND RECORD-KEEPING REQUIREMENTS

9.7 Record-Keeping Requirements

The permittee shall monitor and record the following information:

- The number of hours of operation of the Panel Master cutter in hours per day and hours per any consecutive 12-month period.
- The pressure drop across the fume/dust collector system of the Panel Master cutter shall be recorded daily. Pressure drop recordings are not required on days the Panel Master cutter is not in operation

[IDAPA 58.01.01.405, 5/1/94]

9.8 Monitor Pressure Drop

The permittee shall install, calibrate, maintain, and operate a pressure drop monitoring device that measures the pressure differential across the fume/dust collector system of the Panel Master cutter.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

10. COMPRESSOR TEST STAND ENGINE, TEA, BRANIFF STREET

10.1 Process Description

The compressor test stand engine will be relocated from the TEA facility to MPI Apple Street site. The compressor test stand is powered by a Perfex, Model 45E-68, diesel-fired internal horsepower, combustion engine. The diesel engine that powers the compressor test stand has a rated capacity of 130 horsepower and it consumes up to 3.0 gallons of diesel fuel per hour. It will operate less than 450 hours per month.

10.2 Control Description

Emissions from the compressor test stand engine are uncontrolled.

EMISSIONS LIMITS

10.3 Emissions Limits

The PM₁₀, NO_x, SO₂, and CO emissions from the compressor test stand engine stack shall not exceed any corresponding emissions rate limits listed in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

10.4 Opacity Limit

Emissions from the compressor test stand engine stack, or any other stack, vent, or functionally equivalent opening associated with the compressor test stand engine, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[IDAPA 58.01.01.625, 4/5/00]

OPERATING REQUIREMENTS

10.5 Throughput Limits

The maximum daily throughput of the compressor test stand engine shall not exceed 72 gal/day of diesel fuel. The maximum annual throughput of the compressor test stand engine shall not exceed 26,280 gallons per any consecutive 12-month period.

[IDAPA 58.01.01.405, 5/1/94]

10.6 Operation of the Compressor Test Stand Engine

The operation of the diesel engine shall be limited to powering the compressor test stand.

[IDAPA 58.01.01.403, 5/1/94]

MONITORING AND RECORD-KEEPING REQUIREMENTS

10.7 Record-Keeping Requirements

The permittee shall monitor and record the following information:

- The throughput of the fuel supplied to the diesel engine in gallons per day and gallons per any consecutive 12-month period. The throughput for each day may be determined using monthly throughput records.
- The sulfur content of fuel oil received by obtaining a sulfur analysis certificate from the vendor for each batch.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

Truck and Engine Annex (TEA) Site

11. LOCOMOTIVE ENGINE TEST CELL, TEA, BRANIFF STREET

11.1 Process Description

The locomotive engine test cell stand is located near the southeast corner of the main TEA building. The locomotive engine is physically removed from the locomotive and mounted on a stationary engine test cell stand. The stand is used for testing the remanufactured locomotive engines in a sound-deadening room with the combustion exhaust vented through a muffler system and then to a stack. Each engine is tested for a maximum of eight hours at notch # 8 (highest throttle setting). Per hour at notch # 8, 175 gallons of No.2 fuel oil is consumed. The facility was constructed in 1990, and 200 engines are tested annually.

11.2 Engine Test Cell Control Description

Emissions from the locomotive engine test cell are uncontrolled.

EMISSIONS LIMITS

11.3 Engine Test Cell Emissions Limits

The PM₁₀, NO_x, SO₂, CO, and VOC emissions from the engine test cell stack shall not exceed any corresponding emissions rate limits listed in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

11.4 Opacity Limit

Emissions from the locomotive engine test cell stack, or any other stack, vent, or functionally equivalent opening associated with the locomotive engine test cell, shall not exceed 20% opacity for a period or periods aggregating more than three minutes in any 60-minute period as required by IDAPA 58.01.01.625. Opacity shall be determined by the procedures contained in IDAPA 58.01.01.625.

[IDAPA 58.01.01.625, 4/5/00]

OPERATING REQUIREMENTS

11.5 Throughput Limits

The maximum daily throughput of the locomotive engine test cell shall not exceed 1,750 gal/day of diesel fuel. The maximum annual throughput of the locomotive engine test cell shall not exceed 280,000 gallons per any consecutive 12-month period.

[IDAPA 58.01.01.405, 5/1/94]

11.6 Production Limits

The maximum number of locomotive engines tested shall not exceed 200 per any consecutive 12-month period.

[IDAPA 58.01.01.403, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

11.7 Hours of Operation Limits

The maximum daily hours of operation of the locomotive engine test cell shall not exceed 10 hours per day.
[IDAPA 58.01.01.405, 5/1/94]

MONITORING AND RECORD-KEEPING REQUIREMENTS

11.8 Record-Keeping Requirements

The permittee shall monitor and record the following information in records:

- On a weekly basis, the permittee shall monitor and record the visible emissions observations and the conditions at the time of observations.
- The throughput of the fuel supplied to the locomotive engine test cell in gallons per day and gallons per any consecutive 12-month period.
- The number of hours of operation of the locomotive engine test cell in hours per day and hours per any consecutive 12-month period.
- The number of locomotive engines produced at the engine test cell stand per month and per any consecutive 12-month period.
- The sulfur content of each batch of fuel oil received by obtaining a sulfur analysis certificate from the vendor for each.

[IDAPA 58.01.01.405, 5/1/94]

11.9 Operations and Maintenance Manual Requirements

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the locomotive engine test cell stand. The manual shall describe the procedures that will be followed to comply with the visible emissions limitations contained in IDAPA 58.01.01.625 during the start up of each locomotive engine testing in the locomotive engine test cell stand. This manual shall remain on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

12. SPRAY-PAINT BOOTH, TEA, BRANIFF STREET

12.1 Process Description

The spray-paint booth, Protectaire, Model 530 DTT, at the TEA is used for painting the locomotive engines and trucks. The spray-paint booth has one stack with a flow of 23,400 scfm. The spray-paint booth was constructed in 1990.

12.2 Spray-Paint Booth Control Description

Particulate emissions from the spray-paint booth are controlled by a bank of filters that have a control efficiency of 98%. The VOC emissions are uncontrolled.

EMISSIONS LIMITS

12.3 Paint Booth Emissions Limits

The PM₁₀ and VOC emissions from the paint-booth stack shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

OPERATING REQUIREMENTS

12.4 Paint Booth Usage Limits

The maximum amount of all coatings and solvents sprayed at the spray-paint booth shall not exceed 20 gal/day and 3,000 per consecutive 12-month period (gal/yr). Coatings and solvents shall include, but not be limited to, any enamels, lacquers, primers, clean-up solvents, and reducers.

[IDAPA 58.01.01.405, 5/1/94]

12.5 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for TEA spray-paint-booth air pollution control system according to manufacturer specifications and recommendations. The pressure drop across the air pollution control equipment shall be maintained within manufacturer and O&M manual specifications. The O&M manual shall address the operation, maintenance, and repair of the TEA spray-paint-booth air pollution control system, and shall include, at a minimum, a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

MONITORING AND RECORD-KEEPING REQUIREMENTS

12.7 Record-Keeping Requirements

The permittee shall monitor and record the following information:

- The type and amount of all coatings and solvents sprayed at the spray-paint booth in gallons per day and gallons per month.
- The pressure drop across spray-paint-booth filter system shall be recorded daily. Pressure drop recordings are not required on days the spray-paint-booth is not in operation.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

13. BEAD-BLAST ENCLOSURES (2 UNITS), TEA, BRANIFF STREET

13.1 Process Description

The bead-blast enclosure uses fine-grained, rounded, glass beads -- potter quality Ballotini impact beads, type vi, class 2. The enclosures consist of the following two units: Cycloblast Model 4836-DC100 (Unit 1) bead-blast enclosure and Pangorn-S3 (Unit 2) bead-blast enclosure. The Unit 1 enclosure has one stack with a flow of 775 scfm and was constructed in 1990. The Unit 2 enclosure has one stack with a flow of 1500 scfm and was constructed in 1996.

13.2 Enclosures Control Description

Particulate emissions from each of the enclosures are controlled by a baghouse that has a control efficiency of 98%.

EMISSIONS LIMITS

13.3 Enclosures Emissions Limits

The PM₁₀ emissions from each of the enclosure unit stacks shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

OPERATING REQUIREMENTS

13.4 Blast Media Throughput Limits

The maximum amount of blast media throughput at each of the enclosure units shall not exceed 960 lb/hr.

[IDAPA 58.01.01.405, 5/1/94]

13.5 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the TEA bead-blast enclosure's air pollution control systems according to manufacturer specifications and recommendations. The air pollution control equipment operating parameters shall be maintained within manufacturer and O&M manual specifications. The O&M manual shall address the operation, maintenance, and repair of the TEA bead-blast enclosure's air pollution control systems, and shall include, at a minimum, a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

MONITORING AND RECORD-KEEPING REQUIREMENTS

13.6 Record-Keeping Requirements

The permittee shall monitor and record the following information:

- The amount of blast media throughput in pounds per day at each of the enclosure units.
- The daily hours of operation for each enclosure.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

14. SHOT-BLAST BOOTH

14.1 Process Description

The shot-blast booth is a Hoffman Schmidt/Abrasive Steel Shotblaster. The shot-blast booth uses steel-grit media for the blasting process. The shot-blast booth has one stack with a flow of 8,500 scfm. The booth was constructed in 1994.

14.2 Control Description

Particulate emissions from the shot-blast booth are controlled by a baghouse that has a control efficiency of 99%. The baghouse is a Torit, Model HDFT2-16, Downflow Cartridge Dust Collector.

EMISSIONS LIMITS

14.3 Emissions Limits

The PM₁₀ emissions from the shot-blast-booth stack shall not exceed any corresponding emissions rate limits in the appendix of this permit.

[IDAPA 58.01.01.403, 5/1/94]

OPERATING REQUIREMENTS

14.4 Blast Media Throughput Limits

The maximum amount of steel-grit media throughput at the shot-blast booth shall not exceed 48,000 lb/hr.

[IDAPA 58.01.01.405, 5/1/94]

14.5 Hours of Operation Limits

The maximum daily hours of operation of the shot-blast booth shall not exceed 12 hours per day. The maximum annual hours of operation of the emissions unit shall not exceed 4,380 hours per any consecutive 12-month period.

[IDAPA 58.01.01.405, 5/1/94]

14.7 O&M Manual

Within 60 days of issuance of this permit, the permittee shall have developed an O&M manual for the TEA shot-blast-booth air pollution control system according to manufacturer specifications and recommendations. The pressure drop across the air pollution control equipment shall be maintained within manufacturer and O&M manual specifications. The O&M manual shall address the operation, maintenance, and repair of the TEA shot-blast-booth air pollution control system, and shall include, at a minimum, a general description, normal operating conditions and procedures, methods of preventing malfunctions, appropriate corrective actions to be taken, and provisions for weekly inspections. The O&M manual shall remain on site at all times and shall be made available to Department representatives upon request.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

MONITORING AND RECORD-KEEPING REQUIREMENTS

14.8 Record-Keeping Requirements

The permittee shall monitor and record the following information in records:

- The number of hours of operation of the shot-blast booth in hours per day and hours per any consecutive 12-month period.
- The amount of blast media used in pounds per day at the shot-blast booth.
- The pressure drop across the baghouse of the shot-blast booth shall be recorded daily. Pressure drop recordings are not required on days the shot-blast booth is not in operation.

[IDAPA 58.01.01.405, 5/1/94]

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.

Date Issued: November 5, 2002

Location: Boise, Idaho

15. APPENDIX – EMISSION LIMITS**MotivePower Inc., Boise****Emissions Limits^a Hourly (lb/hr) and Annual^b (T/yr)**

SOURCE	PM ₁₀		SO ₂		CO		NO _x		VOC	
	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
New, large, paint shop- from each spray paint booth stack	0.29	0.195							12.0	8.0
SWBP – blast booth stack	0.03	0.13								
SWBP – total	0.008	0.034								30.0
Old, large, paint shop- each spray paint booth stack	0.232	0.154							12.0	8.0
Small, paint shop-from each stack	0.232	0.097								
MPI bead-blast enclosures- from each stack	0.025	0.11								
Panel Master arc metal cutter	0.159	0.198					1.97	2.46		
Compressor test stand	0.127	0.56	0.119	0.52	0.39	1.71	1.81	7.9		
Locomotive engine test cell stand	3.55	2.84	9.98	7.98	14.7	11.8	140	112	8.10	6.48
Spray-paint booth	0.154	0.119							15.0	7.73
TEA bead-blast enclosures- from each stack	0.025	0.11								
Shot-blast booth	0.624	1.37								
Total	–	5.92	–	8.50	–	13.51	–	122.36	–	60.21

^a As determined by a pollutant-specific EPA reference method, Department-approved alternative, or as determined by the Department's emissions estimation methods used in the permit application analysis.

^b As determined by multiplying the actual or allowable (if actual is not available) pound per hour emissions rate by the allowable hours per year that the process(es) may operate(s), or by actual annual production rates.

AIR QUALITY TIER II OPERATING AND PERMIT TO CONSTRUCT Nn. 001-00107

Permittee: MotivePower, Inc.
Location: Boise, Idaho

Date Issued: November 5, 2002

16. GENERAL PROVISIONS

1. All emissions authorized herein shall be consistent with the terms and conditions of this permit. The emissions of any pollutant in excess of the limitations specified herein, or noncompliance with any other condition or limitation contained in this permit, shall constitute a violation of this permit and the *Rules for the Control of Air Pollution in Idaho*, and the Environmental Protection and Health Act, Idaho Code §39-101 et seq.
2. The permittee shall at all times (except as provided in the *Rules for the Control of Air Pollution in Idaho*) maintain and operate in good working order all treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this permit and other applicable laws for the control of air pollution.
3. The permittee shall allow the Director, and/or his authorized representative(s), the following upon the presentation of credentials:
 - To enter upon the permittee's premises where an emissions source is located, or in which any records are required to be kept under the terms and conditions of this permit.
 - At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit, to inspect any monitoring methods required in this permit, and to require stack emissions testing (i.e., performance tests) in conformance with state-approved or accepted EPA procedures when deemed appropriate by the Director.
4. Except for data determined to be confidential under Section 9-342A *Idaho Code*, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the appropriate regional office of the Department of Environmental Quality.
5. Nothing in this permit is intended to relieve or exempt the permittee from compliance with any applicable federal, state, or local law or regulation, except as specifically provided herein.
6. In the event of any change in control or ownership of source(s) from which the authorized emissions emanate, the permittee shall notify the succeeding owner or controller of the existence of this permit by letter; a copy of which shall be forwarded to the Director.
7. This permit shall be renewable on the expiration date, provided the permittee submits any and all information necessary for the Director to determine the amount and type of air pollutants emitted from the equipment for which this permit is granted. Failure to submit such information within 60 days after receipt of the Director's request shall cause the permit to become void.
8. The Director may require the permittee to develop a list of operation and maintenance procedures to be approved by the Department. Such list of procedures shall become a part of this permit by reference, and the permittee shall adhere to all of the operation and maintenance procedures contained therein.
9. The provisions of this permit are severable, and if any provision of this permit to any circumstance is held invalid, the application of such provision to other circumstances, and the remainder of this permit shall not be affected thereby.